

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|-----------------|---|---|------------------|------|
| Application No. | : | 10/589040   | Confirmation No. | 3939 |
| Applicant       | : | Antonio Francisco Iandoli Espinosa  |                  |      |
| Filed           | : | August 10, 2006   |                  |      |
| TC/A U.         | : | 1796  |                  |      |
| Examiner        | : | Margaret G. Moore   |                  |      |
| Title           | : | ANTICORROSION COATING COMPOSITION IN<br>AQUEOUS DISPERSION COMPRISING AN ORGANIC<br>TITANATE AND/OR ZIRCONATE |                  |      |
| Docket No.      | : | CRE-17903   |                  |      |
| Customer No.    | : | 040854  |                  |      |

Declaration Under 37 CFR §1.132

I, Alain CHESNEAU, declare as follows:

1. I am now working on the subject matter claimed in the captioned patent application. That claimed subject matter relates to coated metallic substrates having particular anticorrosion coatings formed thereon.
2. I was awarded a SCIENTIFIC DIPLOM in Solid physics (Ph D) (France) in 1971.
3. Since 1973, I have been employed in several firms and organism studying, developing and manufacturing coatings and corrosion resistant coatings. Since 2000, I have been employed by DACRAL S.A. (now NOF METAL COATINGS EUROPE S.A.). I am currently the R & D Manager of NOF METAL COATINGS EUROPE S.A.
4. I have developed and manufactured various coatings and corrosion resistant coatings, in particular water- or organic-based coatings containing metallic particles (especially zinc and aluminum flakes) in an inorganic binder.
5. The compositions used in the coated metallic substrates which are the subject of claims in the captioned patent application, are baked to form anticorrosion

coatings. Specifically, by baking the noted compositions at a temperature at least above 180°C and below 350°C, an organo-mineral tridimensional structure in the coating and bonding to the substrate are formed. This structure and bonding to the substrate are major factors in my view which enable the resulting coating to serve as an anticorrosion coating.

6. I understand that claims of the captioned US patent application are rejected in the outstanding Office Action dated January 12, 2010 for allegedly being identically disclosed and/or taught in view of US Patent 6,605,365 to Krienke et al. I understand that the Patent Examiner is of the opinion that the coating composition disclosed in Krienke et al. is the same or equivalent to the anticorrosion coating claimed in my patent application. I believe that the claimed coatings are significantly different for at least the following reasons.

7. The coating composition applied on the substrate in the '365 patent to Krienke et al. does not confer sufficient anticorrosion properties to properly be considered an anticorrosion coating, specifically because the coating is not baked. In fact, the '365 patent states that the coating composition applied on the substrate is only heated to a temperature between ambient and 250°F (about 121°C).


8. From my experience, I know that a coating containing metal particles in an inorganic binder (silane) which is not baked at a temperature at least above 180°C and below 350°C, can not confer anticorrosion properties. Such a coating will not exhibit a resistance to saline mist higher than 200 to 250 hours without red rust, in standard application conditions and measured by means of the standard salt projection test ISO 9227, which is clearly not enough for anticorrosion coatings.

9. I believe that the lack of such resistance to saline mist is due to the lack of formation of a three-dimensional structure of the coating and/or bonding to the substrate if the coating composition is not baked to an appropriate temperature, at least above 180°C.

10. The lack of satisfactory anticorrosion properties is detrimental for the claimed subject matter. The lack of the noted anticorrosion properties is not detrimental for the coatings disclosed by Krienke et al. because the coatings are for surface treatment applications and not for anticorrosion applications. I know that the coatings disclosed in the '365 patent to Krienke et al. are for surface treatment notably by the summary of the invention (especially column 3; line 34), by the thickness of the coating (20 to 500 nm) and by the need for surface preparation to produce strong, durable bonds.

11. I hereby declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that wilful false statements are so made punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States Code and that such wilful false statements may jeopardize the validity of the application or any patent issuing thereon.

June 7<sup>th</sup>, 2010 \_\_\_\_\_  
Date

  
Alain Chesneau